

# Rover PLAST B FT

NC processing centre



 **BIESSE**

When competitiveness  
means that there are  
no technological  
limits to your  
imagination



Made **In** Biesse

## The market demands

a change in manufacturing processes, enabling companies to accept the largest possible number of orders. This is coupled with the need to maintain high quality standards whilst offering product customisation with quick and clearly-defined delivery times.

## Biesse responds

with high-tech, innovative solutions for processing technological materials. Rover Plast B FT is the new NC processing centre with gantry structure and FT work table for nesting operations for plastic and composite materials.

- ▶ **Advanced technology for complex machining operations on all types of material.**
- ▶ **Precision and flexibility across all types of machining operation.**
- ▶ **Dedicated solutions for processing advanced technological materials.**
- ▶ **Increase of manufacturing capacity.**
- ▶ **Easy to integrate seamlessly into any business work-flow.**



Superior technology  
allows businesses to  
make the most of  
every opportunity  
for growth

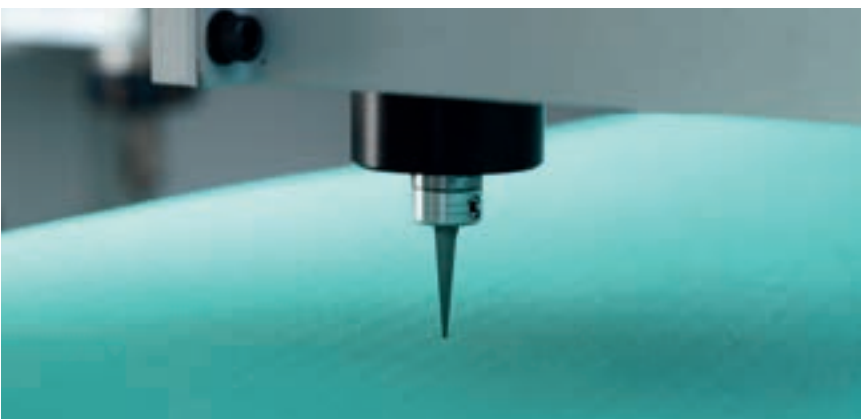


Rover **PLASTB FT**  
NC processing centre



# Advanced technology for complex machining operations on all types of material

**Biesse offers technological solutions for the creation of technical pieces for subcontractors, mechanical components on high-tech materials, visual communications, construction and industry goods and packaging, with machines for working with expanded and compact plastic materials, composites and cardboards.**





# Precision and flexibility across all types of machining operation

**The Rover Plast B FT is the ideal solution for machining materials which vary in terms of format, size, thickness, composition and structure. The work table guarantees maximum hold and reliability when locking panels to be machined in place.**



The aluminium work table offers increased versatility when creating mechanical attachments and locks.



Higher motor power increases acceleration up to 5 m/s<sup>2</sup> and speed up to 120 m/min.



Vacuum modules freely positionable on the FT work table without the need for dedicated connections.





Electrospindles with 5-axis technology, working at 36000 rpm for exceptional speed and performance.



Reduction of tool change set-up time and elimination of operator error, thanks to the contact pre-setter, which automatically determines the length of the tool.



C Axis Torque: more precise, quicker, greater rigidity.

Electrospindles, boring heads and aggregates are designed and manufactured for Biesse by HSD, the global leader in the mechatronics sector.

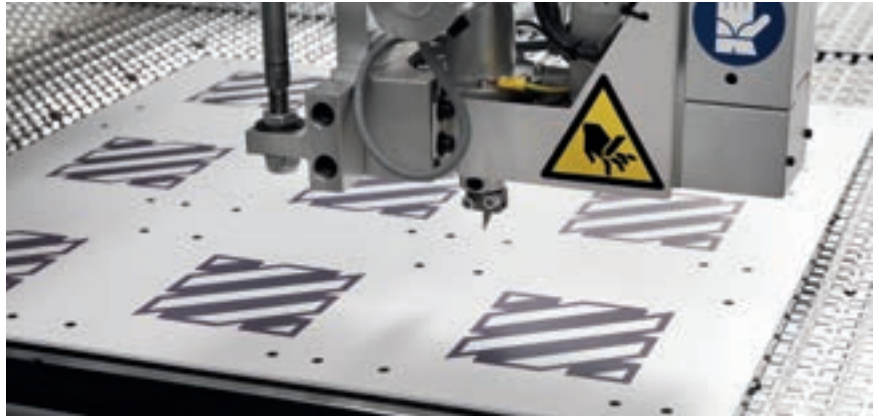
# Dedicated solutions for processing advanced technological materials



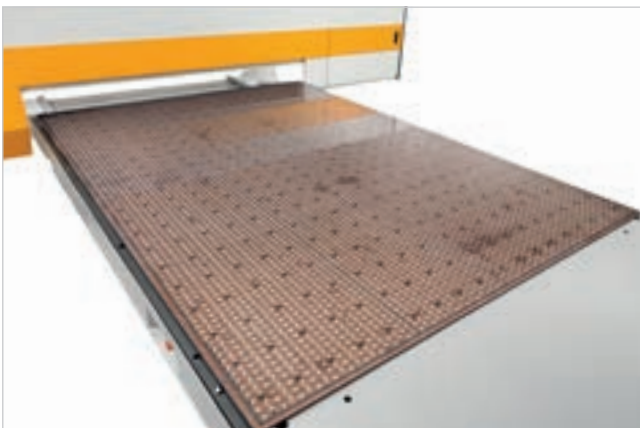
Maximum precision for many type of machining operation thanks to the Tangential/Oscillating Blade, the specific tool unit for processing plastic and composite materials. The titanium components in the cutting unit guarantee long term life, reliability and quality.



Linear and central stops offer maximum accuracy and greater flexibility, even when machining small pieces.



The camera, which allows users to manage print markers, is particularly suited to the graphic arts industry. It can also be used as a support for the cutter and the milling unit.



The polycarbonate work table with micro-perforations generates a vacuum to keep the work components locked in place.

The breathable felt base is ideal for performing cutting operations with an oscillating or tangential blade.

# Performance without limits

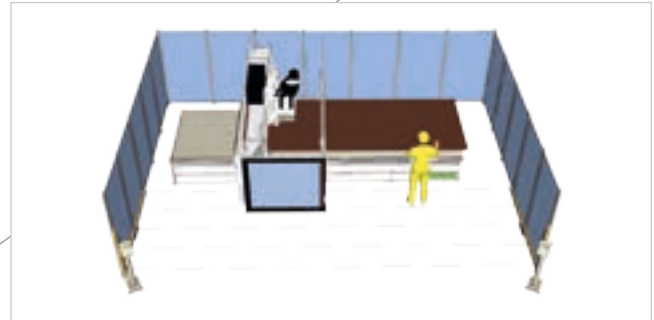


**The only solution for performing milling and cutting operations on technological materials. The tangential/oscillating blade, coupled with a camera for reading print markers, supports the full processing of materials for the graphic arts industry. The precision and quality typical of Rover's technology support the perfect execution of all standard machining centre processing operations.**

## **ROVER TECHNOLOGY**

The high technological content of the world's most popular machining centres meets the requirements of operators who process technological materials. A perfect combination of Biesse innovation and Italian genius.

# Increasing manufacturing capacity



The machine can be configured with tandem loading in order to alternately process panels. This allows for loading or unloading to be carried out during machining operations.



8 to 29 tools and aggregates available in the tool changer, which are loaded automatically when switching from one machining operation to the next.



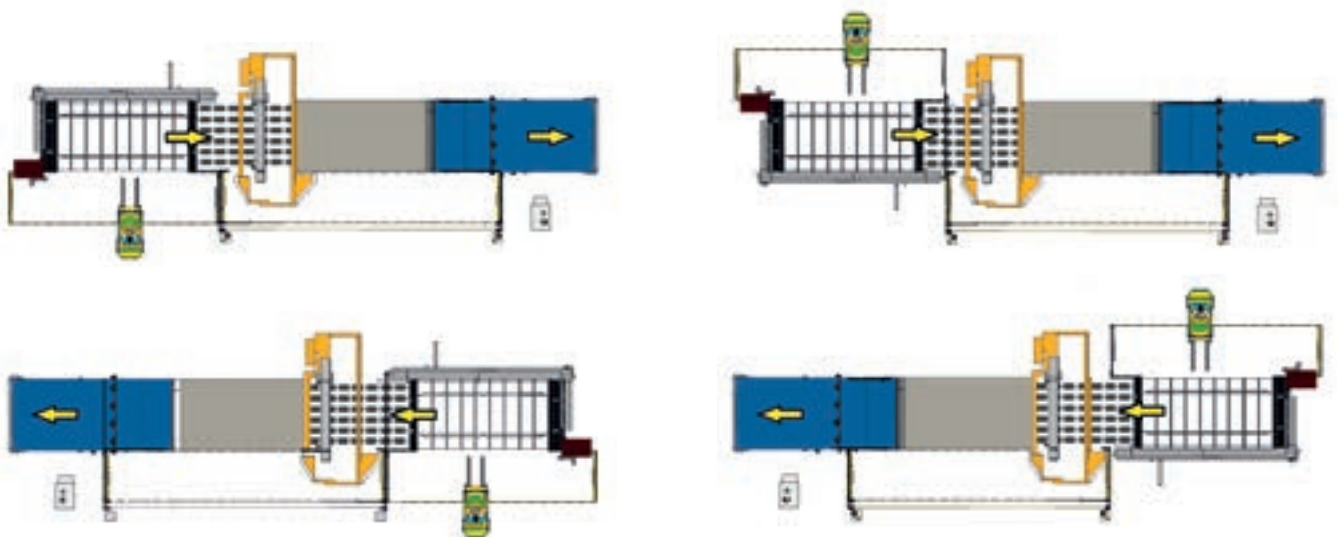
A complete range of aggregates



The NC controlled multi-function unit can be infinitely positioned on a 360 (degree) rotation. It can also be used to house aggregates for specific machining operations such as pocketing for locks, hinges, deep horizontal holes and edge-trimming.

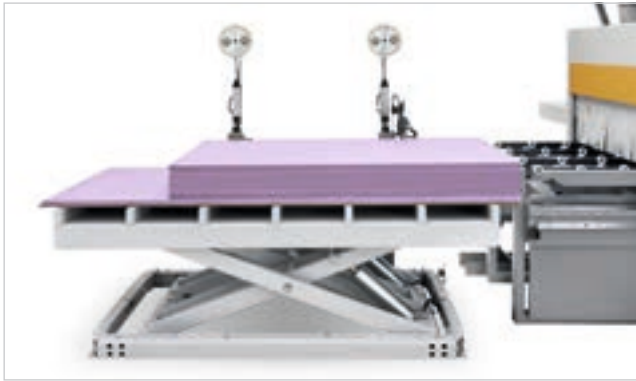
# Easy to integrate seamlessly into any business work-flow

The Rover Plast B FT can be customised according to the work flow, in order to meet customer requirements.



Loading/unloading operations are carried out simultaneously, allowing the operator to remove completed components from the unloading station in the utmost safety whilst the machine is already processing the next panel.

# Loading and unloading solutions



The loading system enables the handling of both porous and non-porous materials of thicknesses greater than 3mm, whilst also offering automatic labelling.



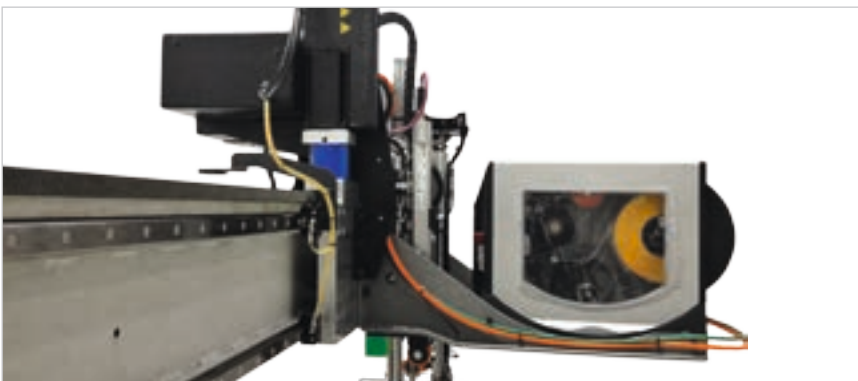
Panel loading system with scissor lift and automatic panel alignment. The system's ease of use ensures long term reliability.



The presser roller supports machining of up to 3 stacked panels for sofa frames etc. and thanks to the automatic unloading function, there are no limits to the use of machining heads.

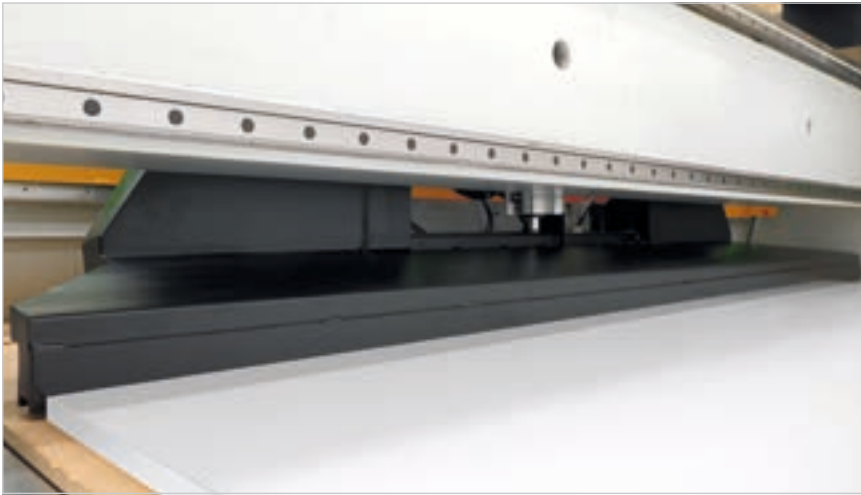


The compressed air-blowing system within the suction pads enables the detachment of thin and porous stacked panels.



Panel identification and traceability within the production flow thanks to automatic or manual labelling.





Machine efficiency is dramatically increased due to the unloading belt, which enables the removal of completed components outside the machine's work area.

# Competitive customisation

**Biesse Systems is a team of highly trained engineers for large scale production processes. Biesse Systems offers integrated cells and systems that are capable of maximising customer competitiveness by combining mass production techniques with a high degree of customisation to meet customers' exact requirements.**

## PRODUCTION LINES

Made-to-measure turnkey factories, plus the integration of Biesse Group solutions with complementary software and machinery, with over 300 systems installed worldwide. A perfect combination of Biesse Group's experience and Italian genius.



# Lean, efficient production flows



**Winstore 3D K3** is an automated magazine for the optimised management of panels for companies who wish to increase their productivity, guaranteeing production with reduced times and costs.

- ▶ **Rapid return on investment thanks to increased performance and reduced costs.**
- ▶ **Production flow optimisation.**
- ▶ **Integration in the production line.**



The **Winstore 3D K3** ensures that the panels to be machined are easily accessible at all times, so it is possible to substantially increase cell productivity compared to manual loading methods using a forklift truck, without frequent stack changes.

- ▶ Reduced delivery times.
- ▶ Reduced warehouse space required.
- ▶ Reduced labour.
- ▶ Waste reduction.
- ▶ Less risk of damaging panels.

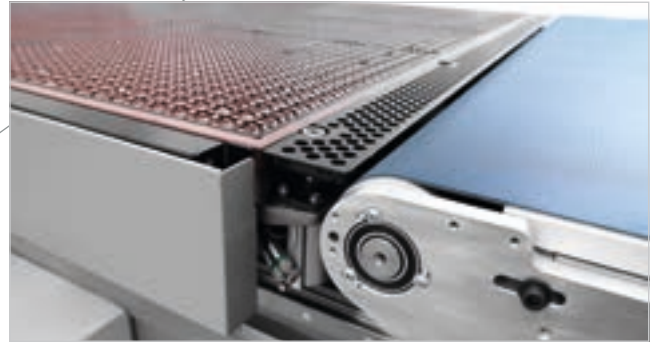


# Optimal cleaning of machined components and work area

The processing of technological materials requires the complete and constant cleaning of the panel to be processed in order to obtain high quality standards. Biesse has developed specific solutions in order to ensure perfect finishes.



Adjustable suction hood with 6 settings.



Panel loading system with scissor lift and automatic panel alignment. The system's ease of use ensures long term reliability.



Additional aspiration kit for unloading belt consisting of 2 suction hoods, on the top and end of the belt.



Automated lubrication is an option that ensures the continuous lubrication of the machine's main moving parts without the need for operator intervention.

Predisposed for Menzel lubrication in order to provide a better finish during aluminium processing operations.

The Air Jet System cools the tool with air at -14°C in order to keep the tool from overheating and prevent the material from melting.



# Maximum operator safety

**Biesse machines are designed to enable operators to work in complete safety.**

Long term safety and reliability thanks to the new bumpers combined with photocells with no footprint or mechanical wear.



22 overlaid layers of side curtain guards to protect the working unit, which are flexible to enable the machine to work at maximum speed in total safety.



Remote control panel for direct and immediate operator control.



**Working unit total protection.**

Maximum visibility of machining operation. LED bar with 5 colours, indicating the machine status in real time.

# High-tech becomes accessible and intuitive



**bSolid** is a 3D cad cam software program that supports the performance of any machining operation thanks to vertical modules designed for specific manufacturing processes.

- ▶ **Planning in just a few clicks, with endless possibilities.**
- ▶ **Simulating machining operations to view the process prior to manufacture and maximise material and process efficiencies.**
- ▶ **Virtual prototyping of the component to avoid collisions and ensure optimal machine efficiency.**

Watch the **bSolid** ad at: [youtube.com/biessegroup](https://youtube.com/biessegroup)





bSolid



# Reduced time and waste



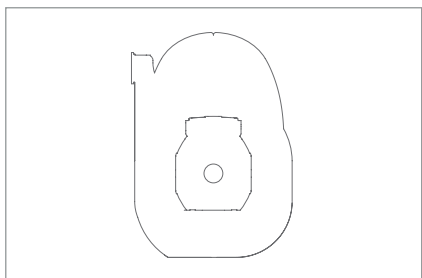
**bNest** is the bSuite plugin specifically for nesting operations. It allows you to organise your nesting projects in a simple way, reducing the material waste and machining times.

- ▶ **Reduced production costs.**
- ▶ **Simplified work for the operator.**
- ▶ **Integration with company software.**

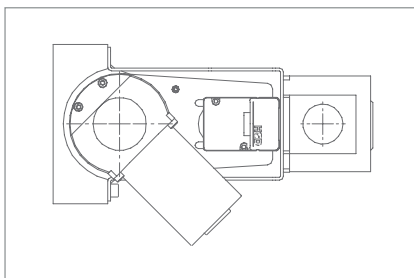
bNest



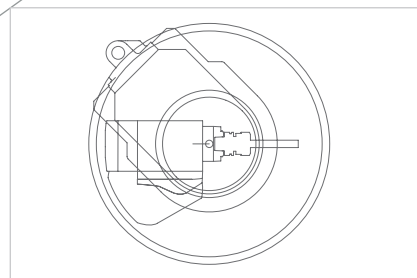
# Configuration



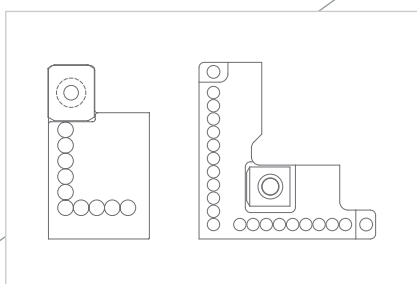
Milling unit from 7.8 to 19.2 kW.



Tangential / Oscillating blade.

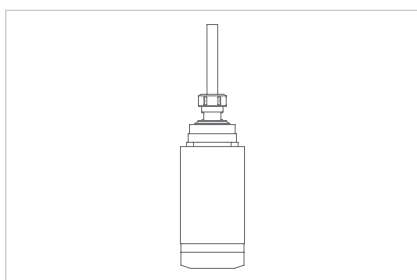


5 axis heads of 7.8 to 13 kW

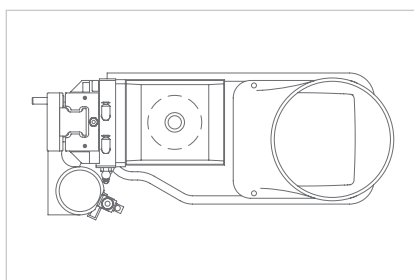


## 10 -20 tool boring unit.

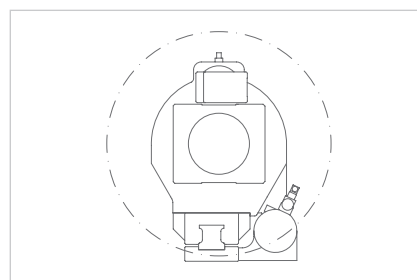
The milling units for 10-20 tools are available with horizontal tool kits and blades.



5.4 kW horizontal milling unit.



7.2 kW vertical milling unit.



Multi-function unit with 360° rotation.

# Biesse machining centres for processing technological materials

## CNC - NESTING



ROVER PLAST J FT



ROVER PLAST A FT



ROVER PLAST B FT

## PANEL SAWS



SELCO PLAST SK4



SELCO PLAST WN6

## VERTICAL CNC



BREMA PLAST EKO 2.1

## WATER JET CUTTING SYSTEMS



PRIMUS PLAST 184



PRIMUS PLAST 202-322-324-326

## SANDING MACHINES

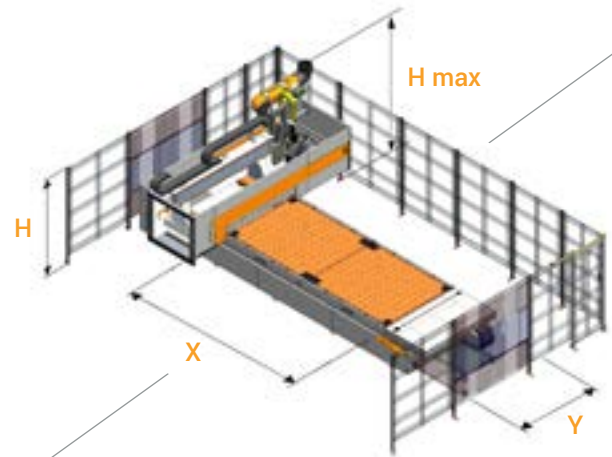


VIET PLAST S211-S1-S2



VIET PLAST OPERA 5-7-R

# Technical specifications

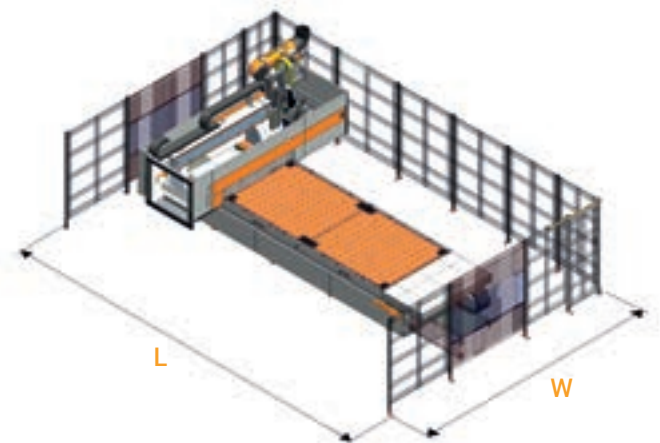


## Working fields and height Z

	X		Y		Pendular NO suspension		Z		H		H max	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
Rover Plast B FT 1224	2465	97	1260	50	-	-	200	8	1980	78	2730	107
Rover Plast B FT 1536	3765	148	1560	61	1390	55	200	8	1980	78	2730	107
Rover Plast B FT 2231	3100	122	2205	87	1060	42	200	8	1980	78	2730	107
Rover Plast B FT 2243	4300	169	2205	87	1660	65	200	8	1980	78	2730	107

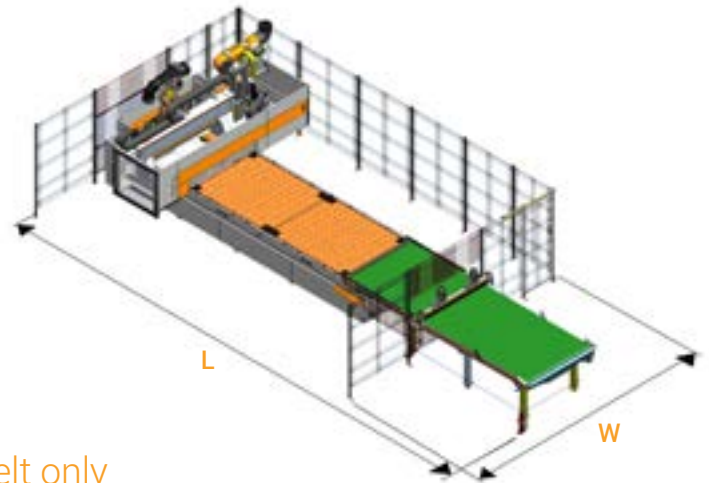
## Speed

	X		Y		Z		Vector	
	m/min	ft/min	m/min	ft/min	m/min	ft/min	m/min	ft/min
Rover Plast B FT	85	279	85	279	35	115	120	394



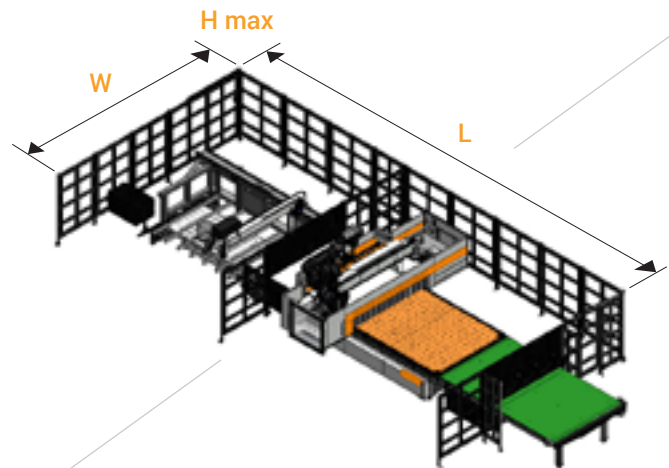
## Overall stand alone dimensions

Front access	L				W			
	NCE		CE		NCE		CE	
	mm	inch	mm	inch	mm	inch	mm	inch
Rover Plast B FT 1224	6435	253	6435	253	5034	198	5137	202
Rover Plast B FT 1536	8338	328	8338	328	5364	211	5647	222
Rover Plast B FT 2231	7648	301	7648	301	6024	237	6307	248
Rover Plast B FT 2243	8878	350	8878	350	6024	237	6307	248



## Overall dimensions of unloading belt only

Unloading belt	L				W			
	LH > RH		RH > LH		LH > RH		RH > LH	
	NCE / CE		NCE / CE		NCE / CE		NCE / CE	
	mm	inch	mm	inch	mm	inch	mm	inch
Rover Plast B FT 1224	8184	321	8154	321	5317	209	5317	209
Rover Plast B FT 1536	10679	420	10615	418	5647	222	5647	222
Rover Plast B FT 2231	9346	368	9248	364	6307	248	6307	248
Rover Plast B FT 2243	11763	463	11665	459	6307	248	6307	248



## Overall dimensions of nesting cell

Nesting cell - Type A	L				W			
	LH > RH		RH > LH		LH > RH		RH > LH	
	NCE / CE		NCE / CE		NCE / CE		NCE / CE	
	mm	inch	mm	inch	mm	inch	mm	inch
Rover Plast B FT 1224	10220	402	9555	376	5317	209	5317	209
Rover Plast B FT 1536	13928	548	13264	522	5647	222	5647	222
Rover Plast B FT 2231	11982	472	11361	447	6307	248	6307	248
Rover Plast B FT 2243	15642	616	14944	588	6307	248	6307	248

# Service & Parts

Direct, seamless co-ordination of service requests between Service and Parts.  
Support for Key Customers by dedicated Biesse personnel, either in-house and/or at the customer's site.

## Biesse Service

- ▶ Machine and system installation and commissioning.
- ▶ Training centre dedicated to Biesse Field engineers, subsidiary and dealer personnel; client training directly at client's site.
- ▶ Overhaul, upgrade, repair and maintenance.
- ▶ Remote troubleshooting and diagnostics.
- ▶ Software upgrade.

500 / Biesse Field engineers in Italy and worldwide.

50 / Biesse engineers manning a Teleservice Centre.

550 / Certified Dealer engineers.

120 / Training courses in a variety of languages every year.



The Biesse Group promotes, nurtures and develops close and constructive relationships with customers in order to better understand their needs and improve its products and after-sales service through two dedicated areas: Biesse Service and Biesse Parts.

With its global network and highly specialised team, it offers technical service and machine/component spares anywhere in the world on-site and 24/7 on-line.



## Biesse Parts

- ▶ Original Biesse spares and spare kits customised for different machine models.
- ▶ Spare part identification support.
- ▶ Offices of DHL, UPS and GLS logistics partners located within the Biesse spare part warehouse, with multiple daily pick-ups.
- ▶ Order fulfilment time optimised thanks to a global distribution network with de-localised, automated warehouses.

87% ✓ of downtime machine orders fulfilled within 24 hours.

95% ✓ of orders delivered in full on time.

100 ✓ spare part staff in Italy and worldwide.

500 ✓ orders processed every day.

# Made **With** Biesse

## Upm Modena: from the concept to the finished product.

Matthew Gualdi is the commercial director of Upm, the Modena-based company that has been operating for over seventy years in the visual communications and illuminated sign sector, as well as more recently in the general contractor industry. "We are able," states Gualdi "to offer turnkey solutions, from concept to

finished product, tailored to the needs of our customers. We manage all design, technical, bureaucratic and logistics aspects with a winning combination of highly-qualified technical and graphics staff, who work with advanced tools, cutting-edge technologies and innovative materials." Biesse has played a de-

cisive role in transforming Upm's commitment to innovation into a reality: "We had always used machines that could be defined as slightly 'niche'. Then, we decided to equip ourselves with a more technologically-advanced and powerful machine: and we found the perfect solution with Biesse Group".



[www.upm-italy.com](http://www.upm-italy.com)



# Biesse Group

In

1 industrial group, 4 divisions  
and 8 production sites.

How

€ 14 million p/a in R&D and 200 patents registered.

Where

34 branches and 300 agents/selected dealers.

With

customers in 120 countries (manufacturers of furniture,  
design items and door/window frames, producers of ele-  
ments for the building, nautical and aerospace industries).

We

3,200 employees throughout the world.

**Biesse Group** is a multinational leader in the  
technology for processing wood, glass, stone, plastic  
and metal.

Founded in Pesaro in 1969, by Giancarlo Selci, the  
company has been listed on the Stock Exchange  
(STAR segment) since June 2001.

 **BIESSEGROUP**

 **BIESSE**

 **INTERMAC**

 **DIAMUT**

**MECHATRONICS**

